

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A biological information measuring apparatus comprising:

a light source;

a living body measuring optical element of applying light emitted from ~~said the~~ light source to a living body and receiving light returning from ~~said the~~ living body;

a light detector of detecting ~~said the~~ light received by ~~said the~~ living body measuring optical element; and

a ~~reference~~-light guide capable of guiding the light applied by ~~said the~~ living body measuring optical element so that the light can be returned to ~~said the~~ living body measuring optical element, when the ~~reference~~-light guide is in a state of being arranged in contact with ~~said the~~ living body measuring optical element,

wherein the light guide is formed of a material having a refractive index higher than that of the air and lower than that of the living body measuring optical element.

2. (Currently Amended) The biological information measuring apparatus according to claim 1, further comprising a calculation section of providing biological information of ~~said the~~ living body through calculation based on the light returned from ~~said the~~ living body and detected by ~~said the~~ light detector,

wherein the calculation section detects that at least one of ~~said the~~ light source, ~~said the~~ living body measuring optical element and ~~said the~~ light detector abnormally functions based on the light detected by ~~said the~~ light detector in a state where ~~said the~~ light guide is arranged in contact with ~~said the~~ living body measuring optical element.

3. (Currently Amended) The biological information measuring apparatus according to claim 1, further comprising a calculation section of providing biological information of ~~said~~

the living body through calculation based on the light returning from ~~said~~the living body and detected by ~~said~~the light detector,

wherein the calculation section corrects ~~said~~the biological information based on the light detected by ~~said~~the light detector in a state where ~~said~~the light guide is arranged in contact with ~~said~~the living body measuring optical element.

4. (Currently Amended) The biological information measuring apparatus according to claim 1, wherein a concave-convex portion is formed on a part of the surface of ~~said~~the living body measuring optical element, and the part of ~~said~~the light guide which is to be in contact with ~~said~~the living body measuring optical element is deformable.

5. (Cancelled)

6. (Currently Amended) The biological information measuring apparatus according to claim 1, wherein ~~said~~the light guide is a scattering body.

7. (Currently Amended) The biological information measuring apparatus according to claim 4, wherein ~~said~~the light guide is an elastic substance.

8. (Currently Amended) The biological information measuring apparatus according to claim 7, wherein ~~said~~the light guide has an elasticity modulus of 1 to 10 MPa.

9. (Currently Amended) A reference element for use in a biological information measuring apparatus comprising:

a light source;

a living body measuring optical element of applying light emitted from ~~said~~the light source to a living body and receiving light returning from ~~said~~the living body; and

a light detector of detecting the light received by ~~said~~the living body measuring optical element,

the reference element comprising:

a light guide capable of guiding the light applied by ~~said~~the living body measuring optical element so that it returns to ~~said~~the living body measuring optical element, when the

light guide is in a state of being arranged in contact with ~~said the~~ living body measuring optical element.~~element.~~

wherein the light guide is formed of a material having a refractive index higher than that of the air and lower than that of the living body measuring optical element.

10. (Currently Amended) The reference element according to claim 9, further comprising a cover of covering a portion of ~~said the~~ light guide other than the portion which is in contact with ~~said the~~ living body measuring optical element.

11. (Currently Amended) The reference element according to claim 9, wherein a part of ~~said the~~ light guide which is in contact with ~~said the~~ living body measuring optical element is deformable.

12. (Currently Amended) The reference element according to claim 9, wherein ~~said the~~ light guide is formed of a material having a refractive index higher than that of the air and lower than that of ~~said the~~ living body measuring optical element.

13. (Currently Amended) The reference element according to claim 9, wherein ~~said the~~ light guide is a scattering body.

14. (Currently Amended) The reference element according to claim 11, wherein ~~said the~~ light guide is an elastic substance.

15. (Currently Amended) The reference element according to claim 14, wherein ~~said the~~ light guide has an elasticity modulus of 1 to 10 MPa.

16. (Currently Amended) A method of using a biological information measuring apparatus using the biological information measuring apparatus according to claim 1, comprising:

a biological information measuring step of measuring biological information based on the light detected by ~~said the~~ light detector in a state where ~~said the~~ living body measuring optical element is in contact with a target living body to be measured; and

an abnormality-correcting step of detecting or correcting an abnormality based on the light detected by ~~said the~~ light detector in a state where ~~said the~~ reference light guide is in contact with ~~said the~~ living body measuring optical element.

17. (New) The biological information measuring apparatus according to claim 1, wherein the light guide is detachably attached to the living body measuring optical element,

the light detector detects the light that has been emitted from the light source, the emitted light having reached the living body measuring optical element, passed through the living body and returned to the living body measuring optical element,

wherein when the light detector detects the emitted light, the light guide has been removed from the living body measuring optical element, and

biological information of the living body is provided through a calculation based on the light detected by the light detector.

18. (New) The reference element according to claim 9, wherein the light guide is detachably attached to the living body measuring optical element.

19. (New) The method according to claim 16, wherein the light is detected with the light guide being removed from the living body measuring optical element.

20. (New) The biological information measuring apparatus according to claim 1,

the light detector detects the light that has been emitted from the light source, the emitted light having reached the living body measuring optical element, passed through the living body and returned to the living body measuring optical element, and

biological information of the living body is provided through a calculation based on the light detected by the light detector.